

ABSTRACT**5 EARTH LEAKAGE PROTECTION DEVICE AND ELECTRICAL SWITCHGEAR
UNIT COMPRISING SUCH A DEVICE**

10 The earth leakage protection device comprises an input designed to be connected to a
measuring toroid, a comparator to compare a signal representative of an earth leakage
current with a reference threshold, and a processing circuit to command a trip relay for
opening main contacts when an earth leakage fault is detected. The device also comprises a
signal rectifier receiving at least one signal representative of an earth leakage current, and a
filter connected to the rectifier to supply a filtered rectified signal to said comparison
15 means. The electrical switchgear unit comprises main conductors and contacts connected in
series, the measuring toroid of the earth leakage current, the relay, and an earth leakage
protection device with a matching filter connected to the toroid and to the trip relay.